

REMARKS

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow. Applicants respectfully request that the foregoing amendments be entered, at least because they place the application in condition for allowance and reduce the issues for appeal.

Claims 1 and 20 are currently being amended. No new matter is being added.

This amendment changes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

After amending the claims as set forth above, claims 1-29 are now pending in this application.

Rejection under 35 U.S.C. § 103

Claims 1-29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,354,151 to Giannesini (“Giannesini”) in view of U.S. Patent No. 4,844,213 to Travis (“Travis”). Applicants respectfully traverse this rejection for at least the following reasons.

Independent claim 1, as amended, recites “a flexible riser protection configured to protect the riser from impacts by yielding to the force imposed by the ice when the riser is in an extended, load transferring mode, the upper end of the riser protection being attached to the loading/unloading buoy and the riser protection surrounding the riser.” The Patent Office recognizes that Giannesini fails to disclose the riser protection as recited in claim 1, but supplies Travis for disclosing this feature. Applicants submit, however, that Travis fails to suggest modifying the Giannesini system for loading at sea to include a flexible riser protection configured to protect the riser from ice impacts when the riser is in an extended, load transferring mode, where the riser protection surrounds the riser.

Travis discloses an energy absorption system designed for permitting a progressive collapse of the system by absorbing energy within the system. As disclosed in Travis, the energy absorption system is intended for use as guide rails along highways, and can absorb energy from impacts with vehicles such as cars (col. 1, lines 9-16).

Applicants submit, however, that it would have been far from obvious, and in fact would have been quite detrimental, to have used the energy absorption system of Travis to have protected any risers of Giannesini from ice impact, when the riser is in an extended load transferring mode. The flexible riser protection, as recited in claim 1, protects the riser from impacts by yielding to the force imposed by the ice when the riser is in an extended, load transferring mode. By contrast, the energy absorption system of Travis is designed to absorb energy from the object impacting the system by a progressive failure of its elements by plastic deformation (See col. 2, lines 32-39). Employing an energy absorbing system such as that of Travis to protect risers from ice would have at least two problems, (1) the collapsible system might crush the riser it is intended to protect, and (2) the collapsible system, once impacted, would be crushed and need to be replaced. One skilled in the art would not have made such a modification to the Giannesini system. Moreover, the Travis system is intended to absorb energy from the object impacting the system, such as a car, in part to protect the impacting object, i.e., the car. There is no analogous reasons to protect the impacting object in Giannesini, i.e., the ice.

Further, claim 1 as amended recites “the riser protection surrounding the riser.” By contrast, Travis does not suggest a flexible riser protection surrounding a riser to be protected, Travis does not suggest any manner that its cones are to be employed to surround a centrally arranged device which is to be protected. Thus, Travis does not suggest the recited feature of “the riser protection surrounding the riser.”

Still further, claim 1, as amended, recites the “upper end of the riser protection being attached to the loading/unloading buoy.” Giannesini and Travis further fail to suggest this feature of claim 1, where the upper end of the riser protection is attached to the loading/unloading buoy.

The Patent Office asserts on page 5, with respect to the combination of Giannesini and Travis, that “One having skill in the art would have had a reasonable expectation of success using known elements to perform known functions.” To the contrary, applicants submit that one skilled in the art would have had an expectation of disaster by combining the energy abruption system of Travis to protect the riser of Giannesini, for the reasons articulated above.

Independent claim 20, recites “lifting a flexible riser protection encompassing the riser upwards, the riser protection protecting at least an upper portion of the riser by yielding to the force imposed by ice when in a retracted position, the upper end of the riser protection being attached to the buoy and the riser protection surrounding the riser,” and is patentable for reasons analogous to claim 1. Further, Giannesini does not suggest lifting its reservoir 3 upwards.

Independent claim 29 is directed to a method, and recites “lowering a separate, prefabricated unit comprising a reel, a riser reeled on to the reel, and a top configured to form a top of the protective structure, down into the protective structure and connecting an end of the reeled riser to a supply line for hydrocarbons, the connection being achieved by means of a swivel.” As noted in the Amendment filed on September 5, 2007, Giannesini and Travis fail to suggest at least this feature of claim 29, and such a feature would not have been inherent in Giannesini and Travis. Giannesini does not suggest any top for its reservoir 3 separate from a lower portion, and thus cannot suggest lowering a prefabricated unit comprising a top of its reservoir. Moreover, assuming arguendo that riser reels are known in the art, the Patent Office has not supplied a reference that suggests incorporating a riser reel with a top of a protective unit. Travis fails to cure the deficiencies of Giannesini.

The dependent claims are patentable for at least the same reasons as their respective independent claims, as well as for further patentable features recited therein. For example, as noted in the Amendment filed on September 5, 2007, claim 2 recites “wherein the riser is protected at least along a portion of its length, the riser protection being suspended from the submerged turret buoy by means of a plurality of chains or wires.” Giannesini and Travis do

not disclose or suggest any riser protection being suspended from a submerged turret buoy by means of a plurality of chains or wires. Claim 7 recites “wherein the riser may be completely retracted into the protective structure when idle, the riser being stored on a reel arranged inside the protective structure.” The Patent Office has not supplied any reference that discloses or suggests any riser being stored on a reel arranged inside a protective structure.

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check or credit card payment form being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicants hereby petition for such extension under 37 C.F.R. §1.136 and authorize payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

Date January 28, 2008

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